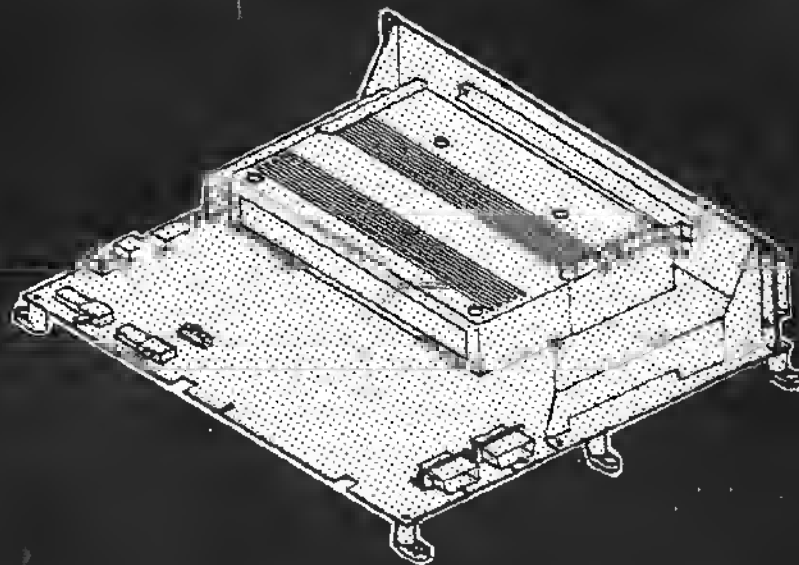# NEO·GEO®

SERVICE
MANUAL
MV-1F

SNK

○WARNING

1) Make sure the game cartridge is installed with the markings matching the main board.

GAME CARTRIDGE MARK

MAIN PCB MARK
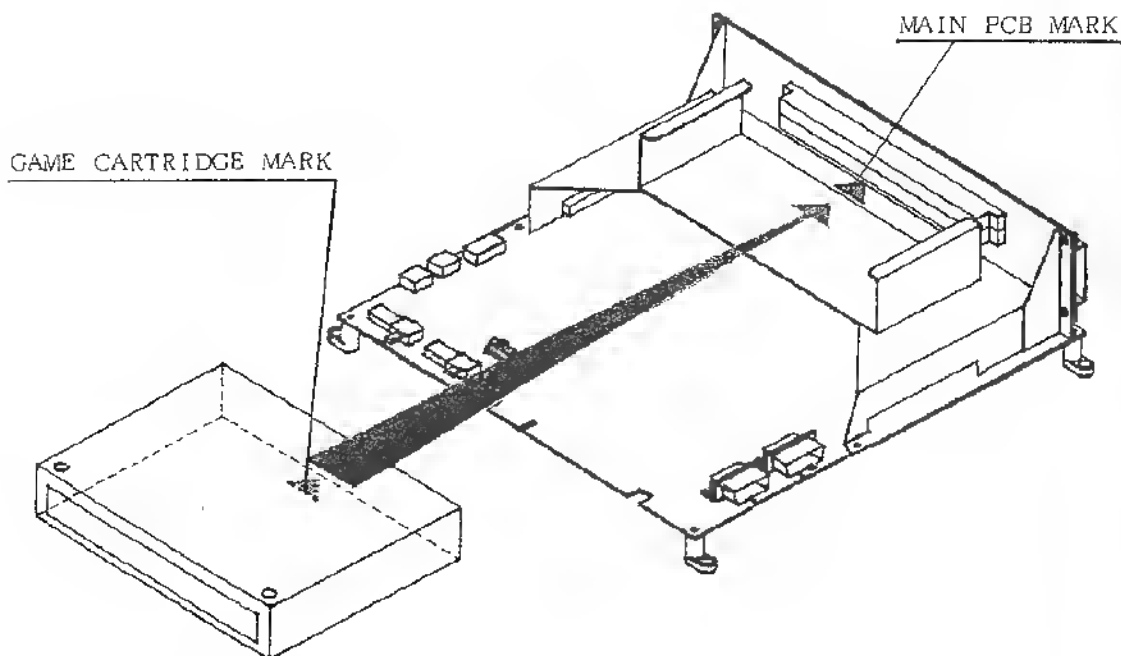
    Mark on cassette should be down side when inserted.

2) Make sure the power is off when you insert or remove the cartridge. Make sure the cartridge is firmly inserted in the slot or it will not work properly.

3) Do not put any electric conductive materials on or in the slots.

4) Do not insert any other cartridge than the MVS cartridge with the 240 pin connector
The NEO GEO Rental System cartridge will not fit on this connector!

5) MVS preserves the income data of max 8 games even the power is off or the game cartridges are removed from PCB.

For example: 6 cartridges has been used, A,B,C,D,E, & F
on the MVS. If new game title G is used, the data for
A,B,C,D,E, & F will still remain.

MEMORY FRAMES

```
┌─────────────┐
│      G      │
├─────────────┤
│      A      │
├─────────────┤
│      B      │
├─────────────┤
│      C      │
├─────────────┤
│      D      │
├─────────────┤
│      E      │
├─────────────┤
│      F      │
└─────────────┘
```
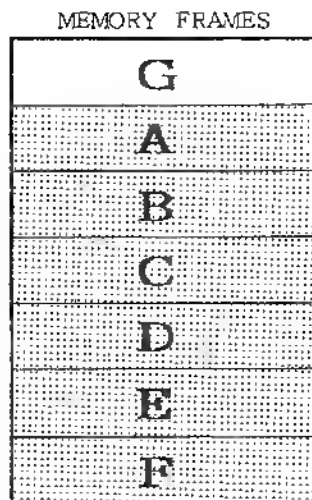
○SOUND OUT PUT

●In case of monaural cabinet (one speaker)

Connect to the 56 pins edge connector.
Put "MONO/STEREO" SWITCH into monaural position.

●In case of stereo cabinet (two speakers)

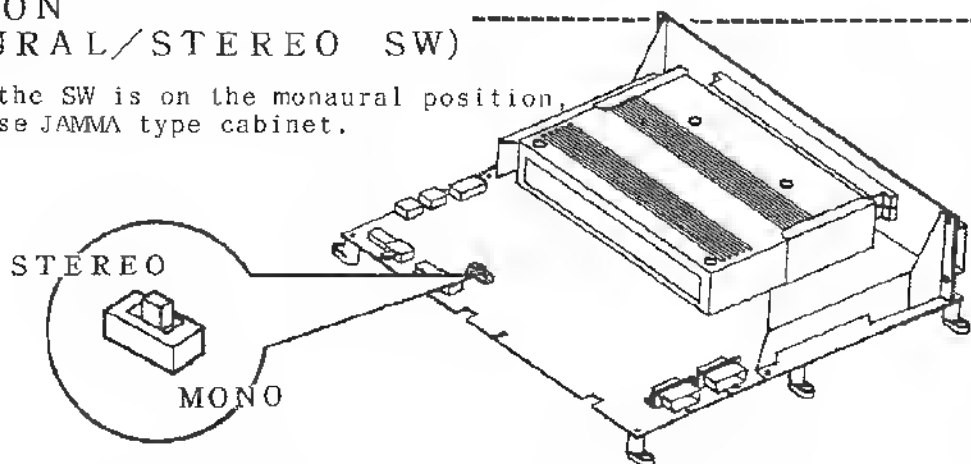Connect to the 4 pin connector (CN2) of speaker out put
on the P.C.B.

Put "MONO/STEREO SWITCH" into stereo position.

(Note)
Don't connect stereo and monaural speaker at same time.

○CAUTION
(MONAURAL／STEREO SW)

Make sure the SW is on the monaural position,
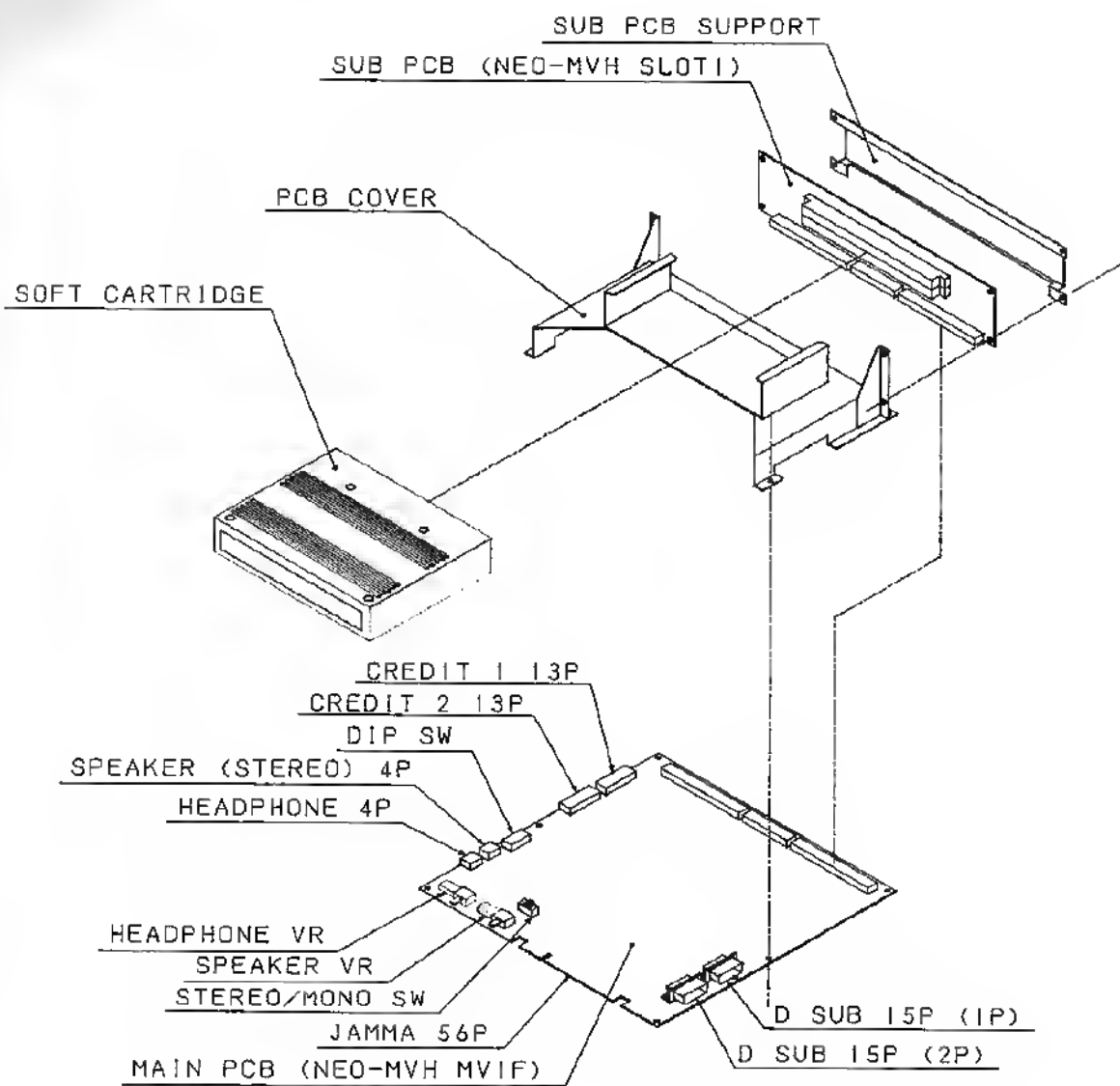when you use JAMMA type cabinet.

STEREO

MONO

Note) It may cause trouble on P.C.B. by miss-setting.

P. C. B. COMPONENT

SUB PCB SUPPORT

SUB PCB (NEO-MVH SLOT1)

PCB COVER

SOFT CARTRIDGE

CREDIT 1 13P

CREDIT 2 13P

DIP SW

SPEAKER (STEREO) 4P

HEADPHONE 4P

HEADPHONE VR

SPEAKER VR

STEREO/MONO SW

JAMMA 56P

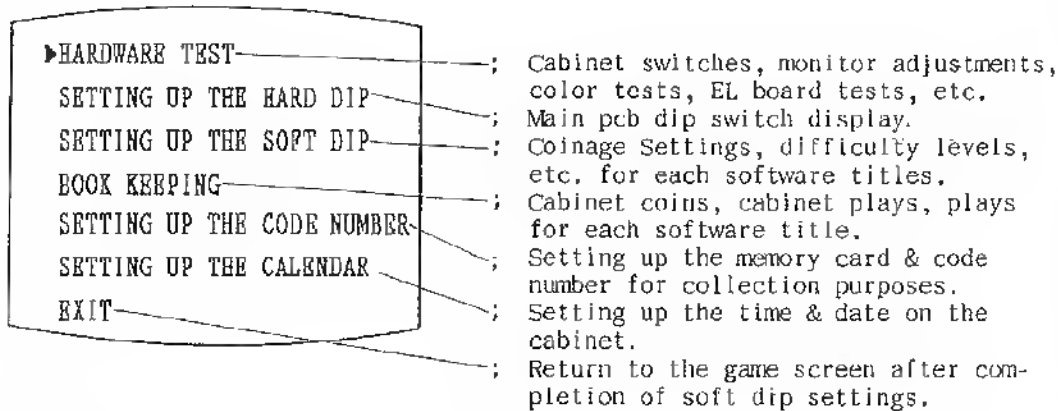MAIN PCB (NEO-MVH MV1F)

D SUB 15P (1P)

D SUB 15P (2P)

4
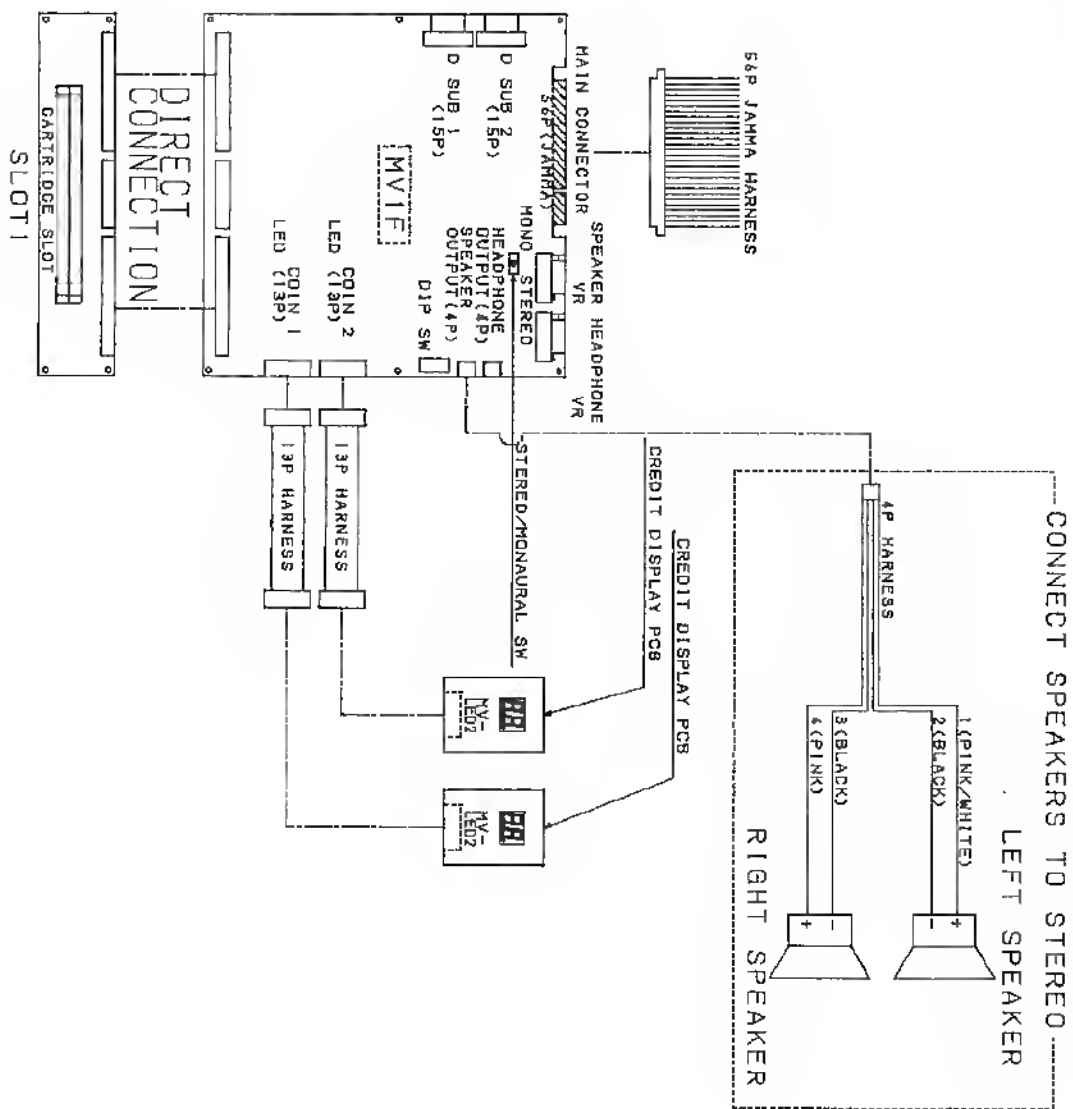
◯MODE SETTING

The MVS (Multi Video System) enables the dip settings to appear
on the monitor instead of the dipswitch settings on conventional pcbs.
It allows you to obtain collection information, game times, etc.
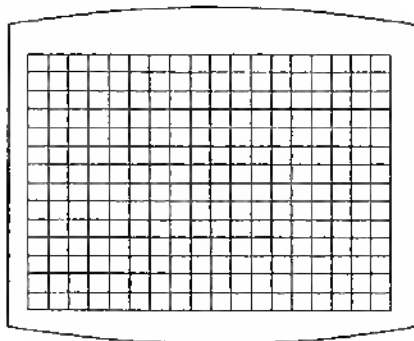The following are the directions on how to operate and choose settings:

How to operate: After turning the power on, press the test switch
inside the cabinet.

☞ Move the cursor to your selection
with the joystick and press "A"button.

MAIN MENU

▶HARDWARE TEST──────────; Cabinet switches, monitor adjustments,
color tests, EL board tests, etc.
SETTING UP THE HARD DIP────; Main pcb dip switch display.
SETTING UP THE SOFT DIP────; Coinage Settings, difficulty levels,
etc. for each software titles.
BOOK KEEPING───────────; Cabinet coins, cabinet plays, plays
for each software title.
SETTING UP THE CODE NUMBER──; Setting up the memory card & code
number for collection purposes.
SETTING UP THE CALENDAR────; Setting up the time & date on the
cabinet.
EXIT───────────────; Return to the game screen after com-
pletion of soft dip settings.

HARDWARE TEST

; Cross Hatch

↓

☞ Press the 1 player start button

RED   GREEN   BLUE   WHITE
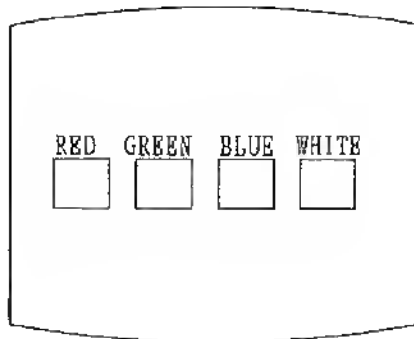
☞ Use this screen to adjust the color
on the monitor

↓

☞ Press the 1 player start button

5

```
  I/O CHECK
       P1 P2  12345678
UP      0  0  00000000
DOWN    0  0
LEFT    0  0
RIGHT   0  0   COIN1    0
PUSH1   0  0   COIN2    0
PUSH2   0  0   SERVICE  0
PUSH3   0  0   TEST     0
PUSH4   0  0   EL LED1 LED2
START   0  0    0  00    00
SELECT  0  0
```

☞ With the dipswitch "on" the number 1 appears on the screen. With the dipswitch "off" the number 0 appears on the screen.

☞ Disregard the part of "EL"

☞ Check if the number of LED 1 is the same as displayed on the LED on the control panel.

↓

☞ Press the 1 player start button

```
        SOUND TEST

            SOUND OFF

            RIGHT

            LEFT

            CENTER
```

☞ In the case of JAMMA, they will output on the same speaker as of right, left, center "Sound Test"

☞ The area in red on the monitor moves from "sound off" to "center" by moving the joystick up and down.

    RIGHT   Sound comes out the right side speaker

    LEFT   Sound comes out the left side speaker

    CENTER   Sound comes out both speakers

↓

☞ Press the 1 player start button

```
      MEMORY CARD TEST

    ※ INSERT MEMORY CARD
```

※Memory Card Function is not provided on $MV-1F$

Go to next step disregarding messages

↓

☞ Press the 1 player start button

```
      BACKUP CLEAR

    OK=PUSH A, B, C BUTTON
```

☞ When you press the A, B, & C buttons simultaneously, you will clear the data.

↓

☞ Press 1P button to start

```
SETTING UP THE CALENDAR
      CURRENT TIME
    17/ 2/90  SAT
    19:30:41
   THE TIME TO BE SET UP
A BUTTON, JOYSTICK=SELECT
        17/ 2/90 19:30:41
```

☞ Red number is changeable. Increase number with "A" button, decrease number with "B" button. Press "D" button when finished with setting.

☞ Press 1P button to start

```
      RETURN TO CROSS HATCH
```

HARD DIP SETTING

```
      SETTING UP THE HARD DIP
            12345678
SETTING MODE    1.......   ON
COMMUNICATION   ...000..   OFF
FREE PLAY       ......0.   OFF
COIN SWITCH     ..0.....   2
STOP MODE       .......0   OFF
            0=OFF 1=ON
```
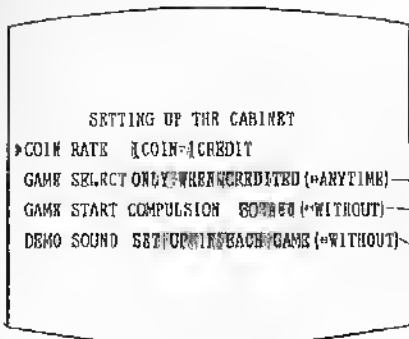
☞ Shows present state of dipswitch.

SETTING UP THE SOFT DIP

```
▶SETTING UP THE CABINET
   SLOT1 NAM-1975
   SLOT2 BASEBALL STARS
   SLOT3 MAHJONG
   SLOT4 TOP PLAYERS GOLF
   SLOT5 MAGICIAN LORD
```
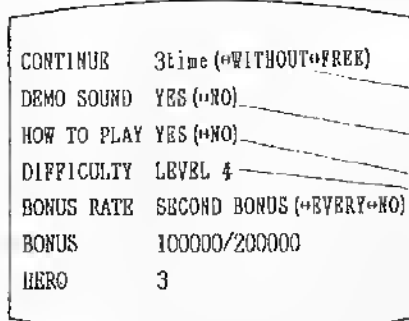
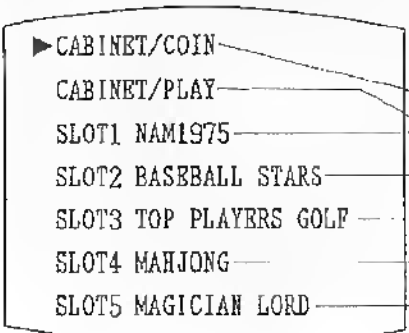☞ Cabinet setting

; Each software setting

SETTING UP THE CABINET

☞ Move cursor to "cabinet setting" and press "A" button.

☞ Move the cursor by joystick and increase with "A" button, decrease with "B" button.

```
      SETTING UP THE CABINET
▶COIN RATE   1COIN=1CREDIT
 GAME SELECT ONLY WHEN CREDITED (=ANYTIME)
 GAME START COMPULSION SOUND (=WITHOUT)
 DEMO SOUND SET FOR MIN EACH GAME (=WITHOUT)
```

☞ Disregard this

☞ Setting of time limitation after inserting coin. (Change with "A", "B" button)

☞ When "without" appears, there is no sound for any of the games. (Change with "A" button)

↓

In the case of NAM-1975
(In the case of each game)

☞ Return to previous menu with "C" button. Move cursor to the game you wish to set and press "A" button.

```
CONTINUE    3time (=WITHOUT=FREE)
DEMO SOUND  YES (=NO)
HOW TO PLAY YES (=NO)
DIFFICULTY  LEVEL 4
BONUS RATE  SECOND BONUS (=EVERY=NO)
BONUS       100000/200000
HERO        3
```

☞ Software dips are slightly different by game.
; Set number of continue plays.

☞ When there is no "demo sound" on cabinet setting, "with" will be ignored.
; With or without game play instructions
; when game starts.
  Difficulty setting. The higher the number, the more difficult.

↓

BOOK KEEPING

☞ Press "C" button once to return to "Soft dip menu setting". Press "C" button again to return to main menu.
Be sure to press "C" button after making game selection.

```
▶CABINET/COIN
 CABINET/PLAY
 SLOT1 NAM1975
 SLOT2 BASEBALL STARS
 SLOT3 TOP PLAYERS GOLF
 SLOT4 MAHJONG
 SLOT5 MAGICIAN LORD
```

☞ Move the cursor to "Book Keeping" with joystick and press "A" button.
; Total coins of cabinet
; Total plays, number of continue plays for the cabinet
; Total plays, number of continue plays for each title

↓

CABINET/COIN

☞ Move the cursor to cabinet/coin with joystick and press "A" button.

CABINET/COIN			
	P1	P2	SERVICE
FEB/17	02244	0	25
FEB/16	04422	0	36
FEB/15	06633	0	47
FEB/14	08844	0	48
FEB/13	02399	0	29
FEB/12	05699	0	94

☞ Weekly income chart.

CABINET/COIN

	P1	P2	SERVICE
JAN	42244	0	25
FEB	44422	0	36
MAR	56633	0	47
APR	68844	0	48
MAY	72399	0	129
JUN	55699	9	294

Cabinet coins for the first 6 months
of the year.

CABINET/COIN

	P1	P2	SERVICE
JUL	42244	0	25
AUG	44422	0	36
SEP	56633	0	47
OCT	68844	0	48
NOV	72399	0	129
DEC	55699	0	294

Cabinet coins for the second 6 months
of the year.

☞ After pressing "C" button, move the cursor
to "Cabinet Play" and press "A" button.

CABINET/PLAY

CABINET/PLAY

	PLAY	CONT.	AV. TIME
FEB/17	22	33	5:20
FEB/16	44	55	6:20
FEB/15	66	77	7:20
FEB/14	88	99	8:20
FEB/13	23	32	9:20
FEB/12	56	55	4:20
FEB/11	11	88	5:20

CABINET/PLAY

	PLAY	CONT.	AV. TIME
JAN	42244	33363	5:20
FEB	44422	35543	6:20
MAR	56633	37773	7:20
APR	68844	39983	8:20
MAY	72399	33232	9:20
JUN	55699	15519	4:20

☞ Press "A" button

CABINET/PLAY			
	PLAY	CONT.	AV. TIME
JUL	42244	33363	5:20
AUG	44422	35543	6:20
SEP	56633	37773	7:20
OCT	68844	39983	8:20
NOV	72399	33232	9:20
DEC	55699	15519	4:20

☞ Retrieve book keeping information for each software title the same way as "Cabinet Coin" & "Cabinet Play".

↓

SETTING UP THE CODE NUMBER

CODE NUMBER SETTING
2408
D BUTTON:SET
CODE NUMBER WILL BE SET INTO
※MEMORY CARD WHEN INSERTED
DURING THIS MODE.

☞ After pressing the "C" button twice, return to the main menu.
Press "A" button after selection CODE NUMBER SETTING with the joystick.

☞ Increase numbers with the "A" button.
Decrease numbers with the "B" button.
Use the joystick to move left to change selected numbers.
Set Code Number Setting with the "D" button.

※Memory Card Function is not

provided on M V − 1 F

Go to next step disregarding messages

The total data of book keeping can be collected by these procedure.

## ○MULTI VIDEO INCOME TOTALIZATION SYSTEM(Book Keeping System)

1) The Multi Video System (MVS) is equipped with back-up ram and calendar IC which allows the daily income data to be saved even when the power is off.

2) After pressing the test button and selecting "Book Keeping" from the menu, you can view the "Income Data" on the screen.

3) It is easy to collect the income data by saving it on the book keeping memory card. The code number system keeps important data confidential.
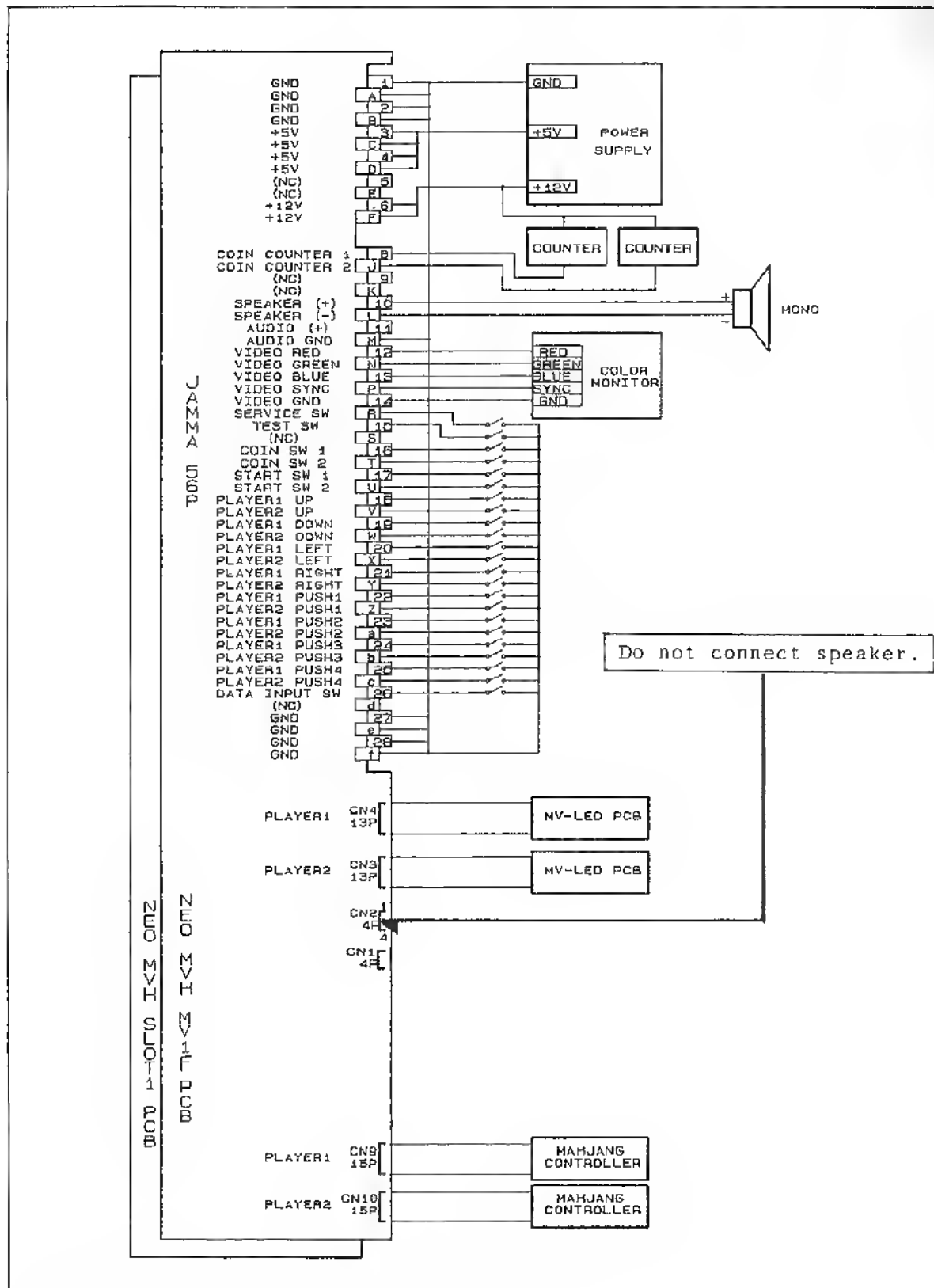
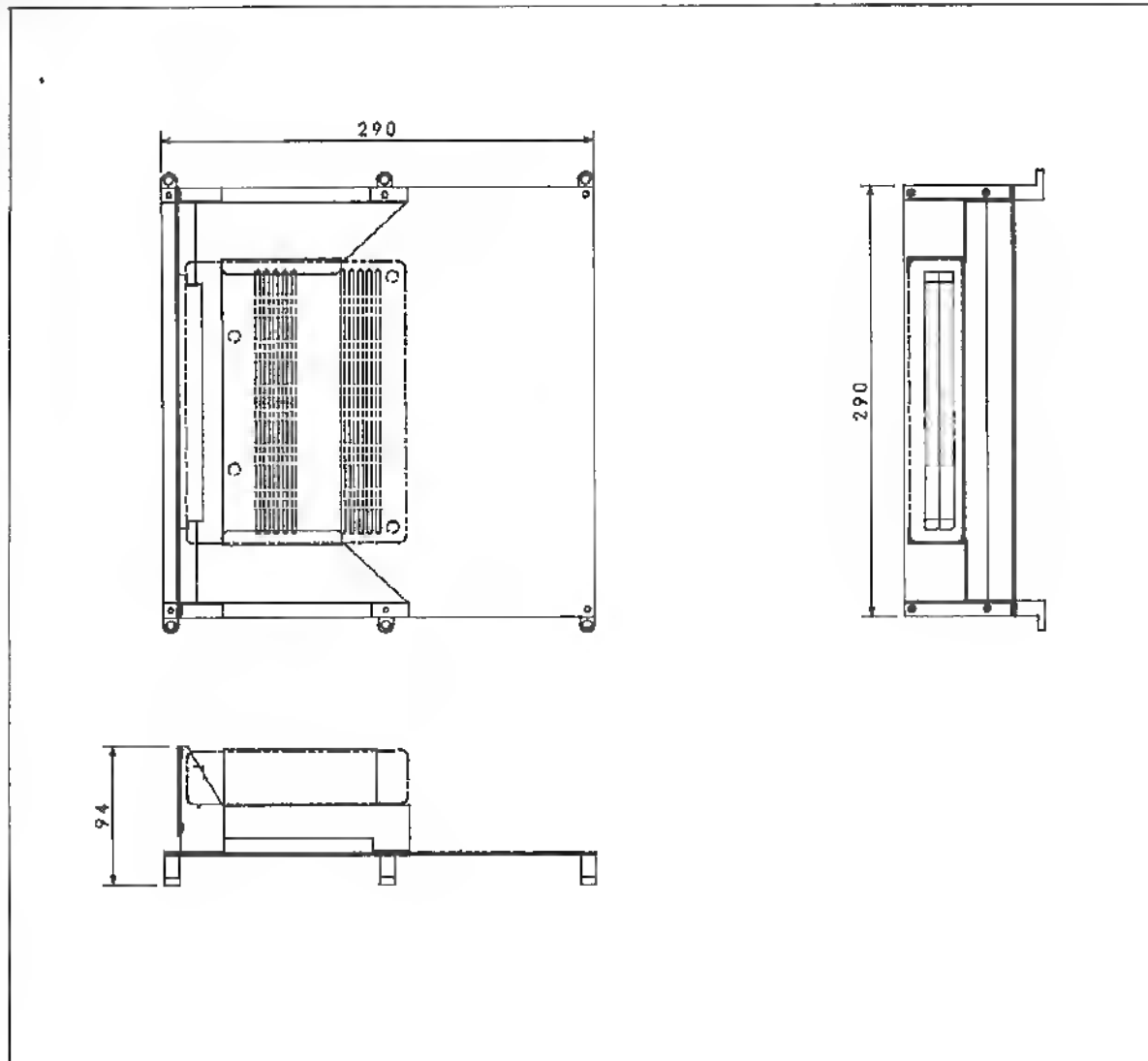Set the switch on PCB on monaural position.

11

○ WIRING DIAGRAM (STEREO)
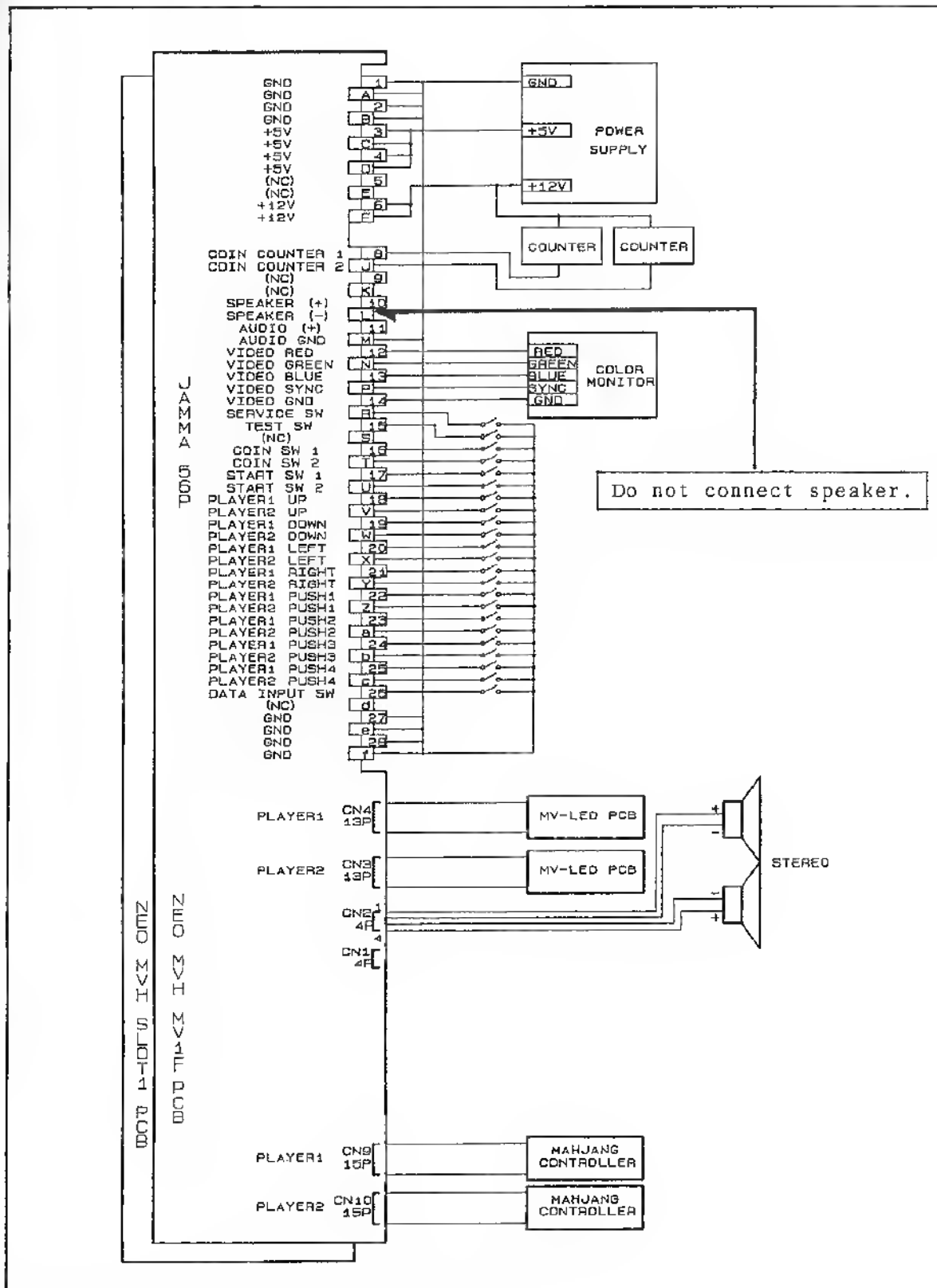
Set the switch on PCB on stereo position.

◯MV1F MAIN HARNESS

SOLDER SIDE	PIN #		PART SIDE
G N D	A	1	G N D
G N D	B	2	G N D
+ 5 V	C	3	+ 5 V
+ 5 V	D	4	+ 5 V
	E	5	
+ 1 2 V	F	6	+ 1 2 V
KEY	H	7	KEY
C O I N C O U N T E R 2	J	8	C O I N C O U N T E R 1
C O I N L O C K O U T 2	K	9	C O I N L O C K O U T 1
S P E A K E R (−)	L	1 0	S P E A K E R (+)
A U D I O (G N D)	M	1 1	
V I D E O G R E E N	N	1 2	V I D E O R E D
V I D E O S Y N C	P	1 3	V I D E O B L U E
S E R V I C E S W	R	1 4	V I D E O G N D
	S	1 5	T E S T S W
C O I N S W 2	T	1 6	C O I N S W 1
S T A R T S W 2	U	1 7	S T A R T S W 1
2 P U P	V	1 8	1 P U P
2 P D O W N	W	1 9	1 P D O W N
2 P L E F T	X	2 0	1 P L E F T
2 P R I G H T	Y	2 1	1 P R I G H T
2 P P U S H 1	Z	2 2	1 P P U S H 1
2 P P U S H 2	a	2 3	1 P P U S H 2
2 P P U S H 3	b	2 4	1 P P U S H 3
2 P P U S H 4	c	2 5	1 P P U S H 4
	d	2 6	
G N D	e	2 7	G N D
G N D	f	2 8	G N D

This is for monaural setting.

○PCB DIMENSION

290

290

94